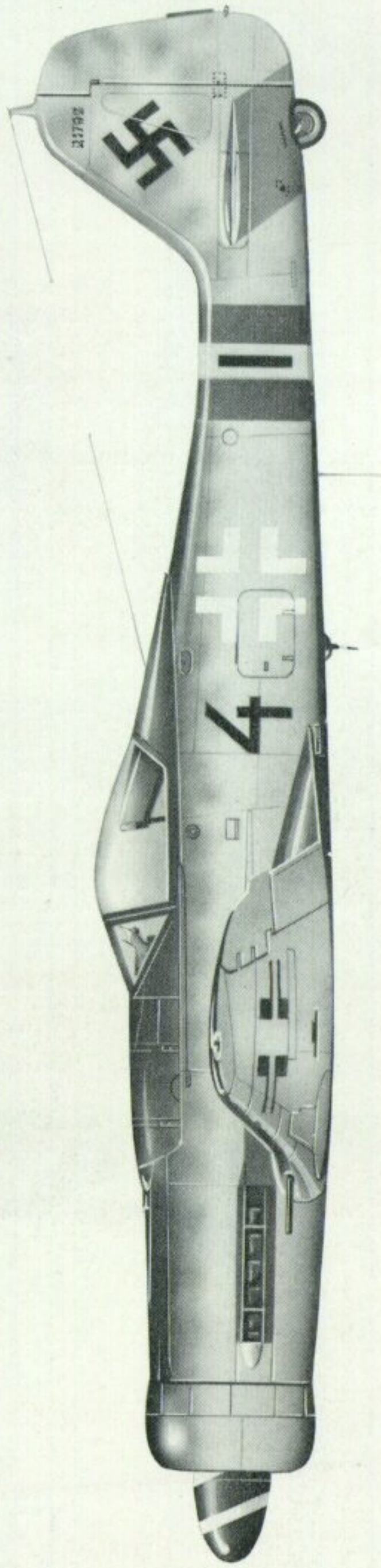
PROFILE PUBLICATIONS

The Focke-Wulf Fw190D/Ta 152 Series



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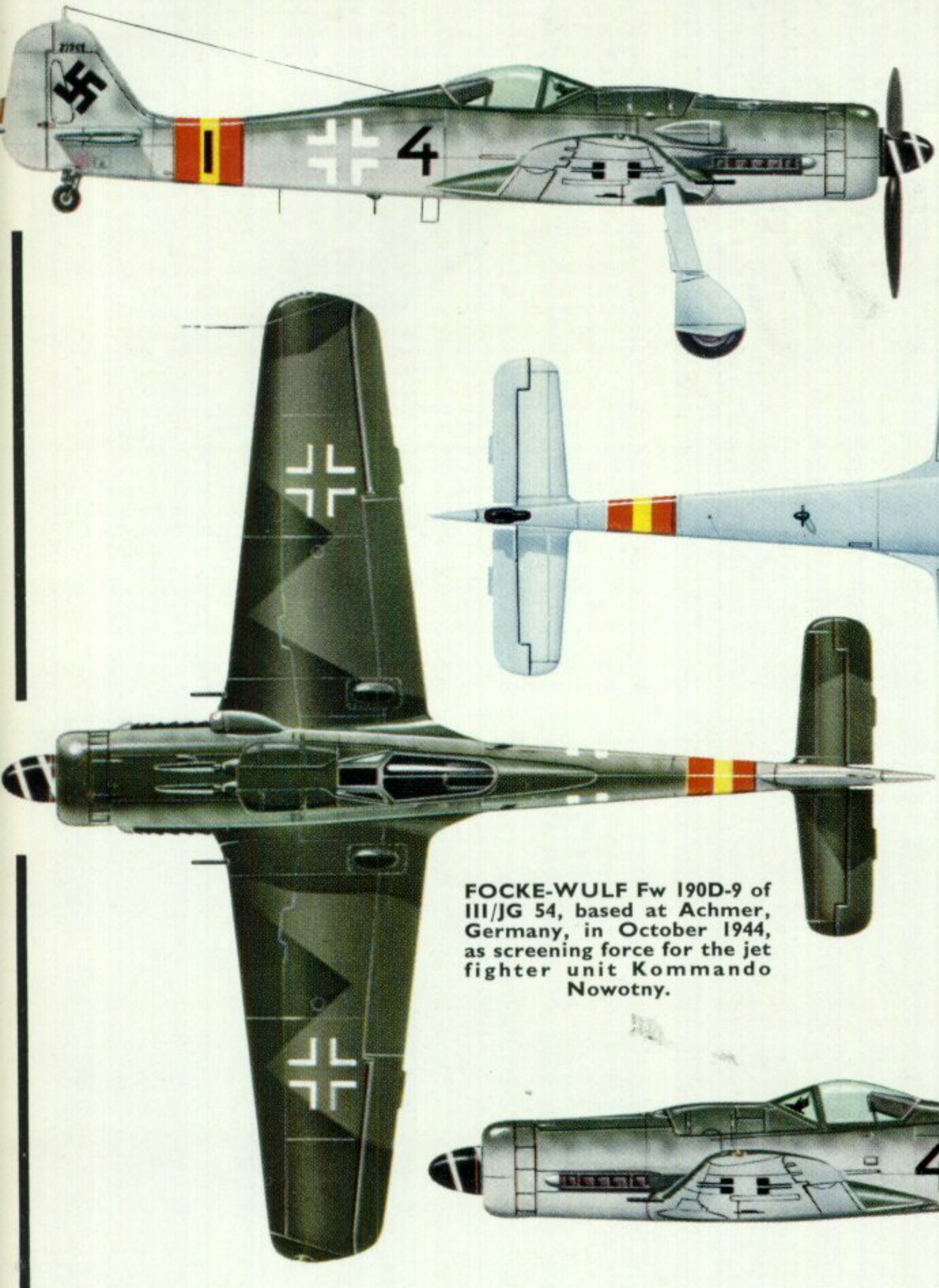
TWO SHILLINGS



FOCKE-WULF Fw 190D-9 of III/JG 54, based at Achmer, Germany, in October 1944, as screening force for the jet fighter unit Kommando Nowotny.

5′ 10′

Bands indicate service with Reichsverteidigung (Home Defence organisation); vertical bar indicates III Gruppe.

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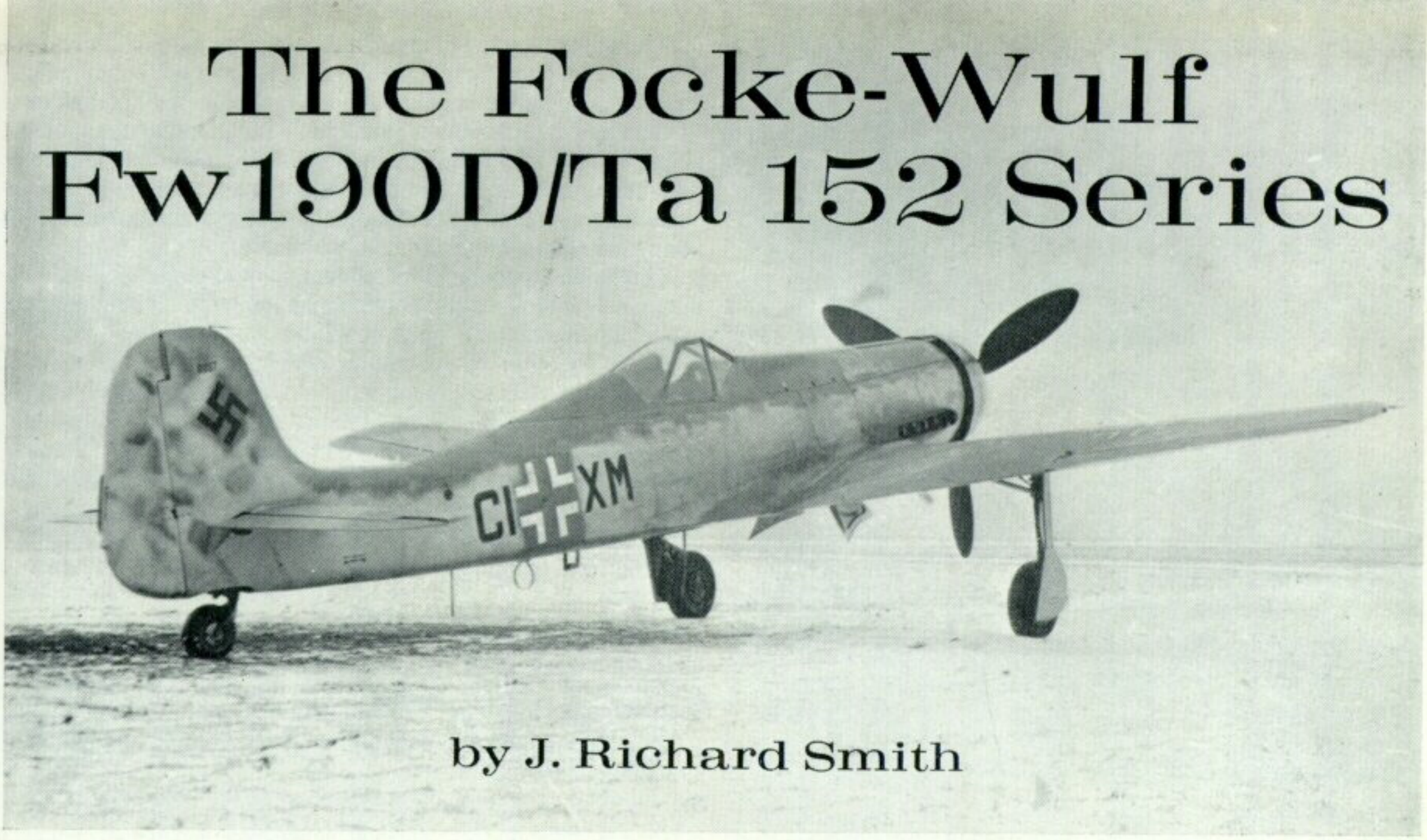
The Focke-Wulf Fw190D/Ta 152 Series



by J. Richard Smith

The Focke-Wulf Ta 152C-0/R11 (W.Nr.0007) coded C I + X M. This machine was powered by a DB 603 L engine and had the standard wing of the Fw 190A-8.
(Photo: H. J. Nowarra)

Following the startling success that accompanied the appearance of the Focke Wulf Fw 190 A-1 over the English Channel in the late spring of 1941 (see *Profile* No. 3, *The Focke-Wulf Fw 190 A*) work was intensified on several high altitude versions of the basic design. The first variant, designated Fw 190 B, was equipped with a B.M.W. 801 radial, but differed from the A series in having a turbo-supercharger and pressurised cabin. Only a few aircraft were built, and the design was soon replaced by the Fw 190 C series. This last was powered by a 1,750-h.p. Daimler Benz DB 603 A in-line engine with turbo-supercharger, the first prototype for which was the Fw 190 V 13 (Werke Nr. 0036) "SK+JS". This was followed by a second aircraft, the Fw 190 V 18 (W.Nr.0040) "CF+OY" which differed in having a four-bladed V.D.M. airscrew and turbo-supercharger—the machine being dubbed "Kangaroo" because of the large under-fuselage fairing which this installation necessitated.

The second and third genuine prototypes for the Fw 190 C (the V 18 being an interim variant) were the V 29 (W.Nr.0054) "CF+KS" and V 30 (W.Nr.0055) "CF+KT" both of which were fitted with the DB 603 G engine. Both the Fw 190 V 31 (W.Nr.0056) "GH+KU" and the V 32 (W.Nr.0057) "GH+KV" were fitted with larger wings and tail surfaces, but the former crashed on 29th April 1943. The last prototype was the Fw 190 V 33 (W.Nr.0058) "GH+KW" which carried an armament of two engine-mounted 13 mm. MG 131 machine guns and two wing-mounted 20 mm. MG 151/20 cannon. However, the Fw 190 C-1 was finally abandoned both because of the poor performance of the Hirth 9-2281 turbo-supercharger and the success of the Jumo 213 powered Fw 190 D series.

The third of the high altitude projects based on the original Focke Wulf Fw 190 design was the Junkers Jumo 213 powered Fw 190 D. The machine was to be based on the standard Fw 190 A-8 airframe, but the fuselage was to be lengthened to accommodate the 1,750-h.p. Jumo 213 A twelve-cylinder, liquid-cooled, in-line engine, and the tail fin and rudder were to be enlarged to compensate for the increased length. The first prototype for the D series was the Fw 190 V 17 (W.Nr.0039) which was converted from a standard A-O during the winter of 1941–42. This machine was later again re-built as the V 17/U1 making its initial flight in May 1944 from Langenhagen airfield as prototype for the Fw 190 D-9 production model. Five further Fw 190 A-Os were converted as D series prototypes, these being designated Fw 190 V 20, V 21, V 22, V 23, and V 25.

A small pre-production batch of Fw 190 D-0s were completed, these being conversions of standard production Fw 190 A-7 airframes. These machines were similar to the A-7, the Jumo 213 engine being installed as a "power egg" although a compensating section was added to the rear fuselage. Armament was carried in the shape of four wing-mounted 20 mm. MG 151/20 cannon and two 13 mm. MG 131 machine guns mounted above the engine cowling. The pre-production aircraft were followed by a small production batch of Fw 190 D-1s; this model differing in having increased vertical tail surfaces.

The first major production model was the Fw 190 D-9. This was intended to replace the Fw 190 A-8 in service, hence there being no D-2 to D-8 designations. In the event, however, two further A series aircraft were built, designated A-9 and A-10. The first prototype of the Fw 190 D-9 was, as mentioned earlier, the Fw 190 V 17/U1. This had a 1,776-h.p. Junkers Jumo 213 A-1 engine with MW-50 water-methanol injection, which boosted power to 2,240 h.p. and gave the aircraft a maximum speed of 426 m.p.h. The second prototype for the D-9 was the Fw 190 V 53 (W.Nr.170003) which followed in less than a month, this having two further 20 mm. MG 151/20 cannons in the wings in addition to the two MG

The Fw 190V-32/U1, a modification of the old V-32, was a forerunner of the Fw 190C. The machine was unarmed, and power was provided by a DB 603 G engine.
(Photo: H. J. Nowarra)

Fw 190V-13 (W.Nr.0036) coded S K + J S, was the first prototype of the proposed Fw 190C series; the engine was a 1,750-h.p. DB 603 A. (Photo: H. J. Nowarra)

151/20 and two MG 131 machine guns.

The third prototype, the Fw 190 V 54 (W.Nr. 174024) was completed in July 1944 but both this and the V 53 were destroyed in a bombing raid. The Fw 190 D-9 entered production in August 1944, and the Focke Wulf factories at Bremen, Johannisthal/Berlin and Sorau/Silesia and was sub-contracted by Agos at Oscherleben, Arados at Brandenburg and Warnemünde and Fieselers at Kassel. The initial production batch (W.Nr.210001 onwards) had a flat topped canopy, later machines sporting a bulged "Galland" hood. (Not to be confused with the clear-view "Galland" canopy employed by late Bf 109G and K variants.) W.Nr.210009 was delivered to Junkers for engine trials. Several other variants of the Fw 190 D-9 were projected including the D-9/R 11 bad weather fighter with PKS 12 directional controls, FuG 16 Za, FuG 25 a and FuG 125 radio equipment. The Fw 190 D-10 was similar to the D-9 but the two 13 mm. machine guns mounted above the engine cowling were replaced by a single 30 mm. MK 108 cannon firing through the spinner.

The next production model was the Fw 190 D-11 ground attack machine of which seven prototypes were completed. The first of these, the Fw 190 V 55 (W.Nr.170923) was powered by a Jumo 213 F-1 engine with three-stage turbo-supercharger and MW-50 injection. This machine had the standard armament of two 20 mm. MG 151/20 and two 13 mm. MG 131 guns, but the second D-11 series aircraft (the Fw 190 V 56—W.Nr.170924) and all subsequent prototypes except the V 60 had the fuselage-mounted MG 131s replaced by two outboard wing-mounted 30 mm. MK 108 cannon. The Fw 190 V 57 (W.Nr. 170926) was re-built from an A-8 and the V 58 (W.Nr.170933) and V 59 (W.Nr.350156) were both similar. The Fw 190 V 60 (W.Nr.350157) was again similar but had no armament, and the V 61 (W.Nr. 350158) was delivered to Junkers Moternwerke for engine trials.

Several conversion packs were provided for the Fw 190 D-11 including the D-11/R5 with TSA 2D bomb-aiming device and eight 110-lb. bombs, the /R11 with FuG 125 D/F radio, the /R21 similar to the R11 without MW-50 injection and the /R25 with additional fuel capacity. The next production model was the Fw D-12 which differed in having a 30 mm. MK 108 cannon firing through the spinner and increased armour protection around the engine. The prototypes for the D-12 were the Fw 190 V 63 (W.Nr. 350165), V 64 (W.Nr.350166) and V 65 (W.Nr. 350167)—all re-built A-8s. The Fw 190 D-12/R5, D-12/R11, D-12/R20, D-12/R21 and D-12/R25 were similar to the D-11/R series. The Fw 190 D-13 had a Jumo 213 EB engine and the engine-mounted 30 mm. MK 108 cannon replaced by a 20 mm. MG 151/20. Two prototypes were converted from Fw 190 A-8s, designated the Fw 190 V 62 (W.Nr.732053) and V 71

Second prototype for the operational D-9 and D-10 series was the Fw 190V-53 (W.Nr.170003). Note the distinctive engine cowling and propeller unit, with paddle-bladed airscrew.
(Photo: H. J. Nowarra)

(W.Nr.732054) and the standard R series conversion packs were to be provided. Only two prototypes of the Fw 190 D-14 were completed, the V 76 (W.Nr. 210040) and V 77 (210043). The D-14 and the generally similar D-15 were to have employed the DB 603 A and EB engines respectively, but were developed into the Ta 152 series.

Many designs based on the Fw 190 D airframe were projected. Most were to utilise the increased power provided by new engines such as the 2,400-h.p. B.M.W. 802 eighteen cylinder radial, the 3,900-h.p. B.M.W. 803 twenty-eight cylinder radial, the 2,660-h.p. DB 609 sixteen cylinder in-line, the 2,020-h.p. DB 614 twenty-four cylinder in-line and the 2,400-h.p. DB 623 twelve cylinder in-line. Another project was for the machine to carry a torpedo, and others included provision for advanced weapon installations.

CONSTRUCTION OF THE Fw 190 D SERIES

The wings comprised an all metal structure with two main spars. The front spar was continuous through the fuselage and the rear was constructed in two sections, attached at either side of the fuselage by pin joints. The spars were built up of flanged plate, reinforced inboard of the ailerons by "L" section extrusions and progressively thickened cap strips to form "I" section members. Outboard of the ailerons the spars had integral flanges. The wing ribs were of flanged plate, the "Z" section stringers were placed span-wise, and the stressed skin was constructed of heavy gauge light alloy. The wing ribs were divided along the centre line to enable the wing to be built in two shells, upper and lower. The front spar was cranked inwards near the wing roots to avoid the wheel wells. Light alloy Frise-type ailerons with fabric covering were fitted and the split trailing edge flaps operated electrically and depressed 10° for take-off and 60° for landing.

The fuselage was an all metal structure, the forward section to the rear of the cockpit having four longerons and a horizontal partition dividing the cockpit from the petrol tank. The rear section of the fuselage was a conventional monocoque structure with light alloy traverse frames and twenty-one "Z" section stringers intersecting but not attached to the frames. The whole was covered with light alloy stressed skin. The power

An early production Fw 190D-9, with 300-litre drop tank under the centre-section. (Photo: H. J. Nowarra)

Three-quarter rear view of a D-9 with 300-litre drop tank. Absence of unit markings on a machine finished in standard camouflage and national insignia probably indicates a production aircraft undergoing manufacturer's tests prior to delivery to the Luftwaffe. (Photo: H. J. Nowarra)

plant comprised a Junkers Jumo 213 A-1 twelve cylinder, liquid-cooled, inverted Vee in-line engine with a maximum take-off power of 1,776 h.p. at 3,250 r.p.m. at sea level. This could be increased to 2,240 h.p. by using water-methanol injection (MW-50). Maximum emergency power in level flight was 1,600 h.p. at 3,250 r.p.m. at 18,000 ft. Armament comprised twin fixed synchronised 13 mm. Rheinemetall-Borsig MG 131 machine guns with 475 r.p.g. mounted above the engine cowling and twin fixed synchronised 20 mm. Mauser MG 151/20 cannon with 250 r.p.g. mounted in the wing roots.

The tail unit comprised an all-metal tailplane continuous through the fuselage and adjustable for incidence. The all-metal stressed skin fin was integral with the fuselage. The control surfaces were of light alloy structure with fabric covering. The undercarriage was of the inward retracting type, the main

An Fw 190D-9, white 15, almost certainly of JG 26, photographed on a forward airstrip during the spring of 1945, after capture. A P-47 is just visible behind the cockpit. (Photo: R. C. Seeley Collection)

wheels being housed ahead of the front spar when raised. The tailwheel was semi-retractable and was interconnected with the main wheels to synchronise retraction, this being achieved by electrical means. The airscrew was of the three-bladed V.D.M. VS 111 constant speed type with metal blades.

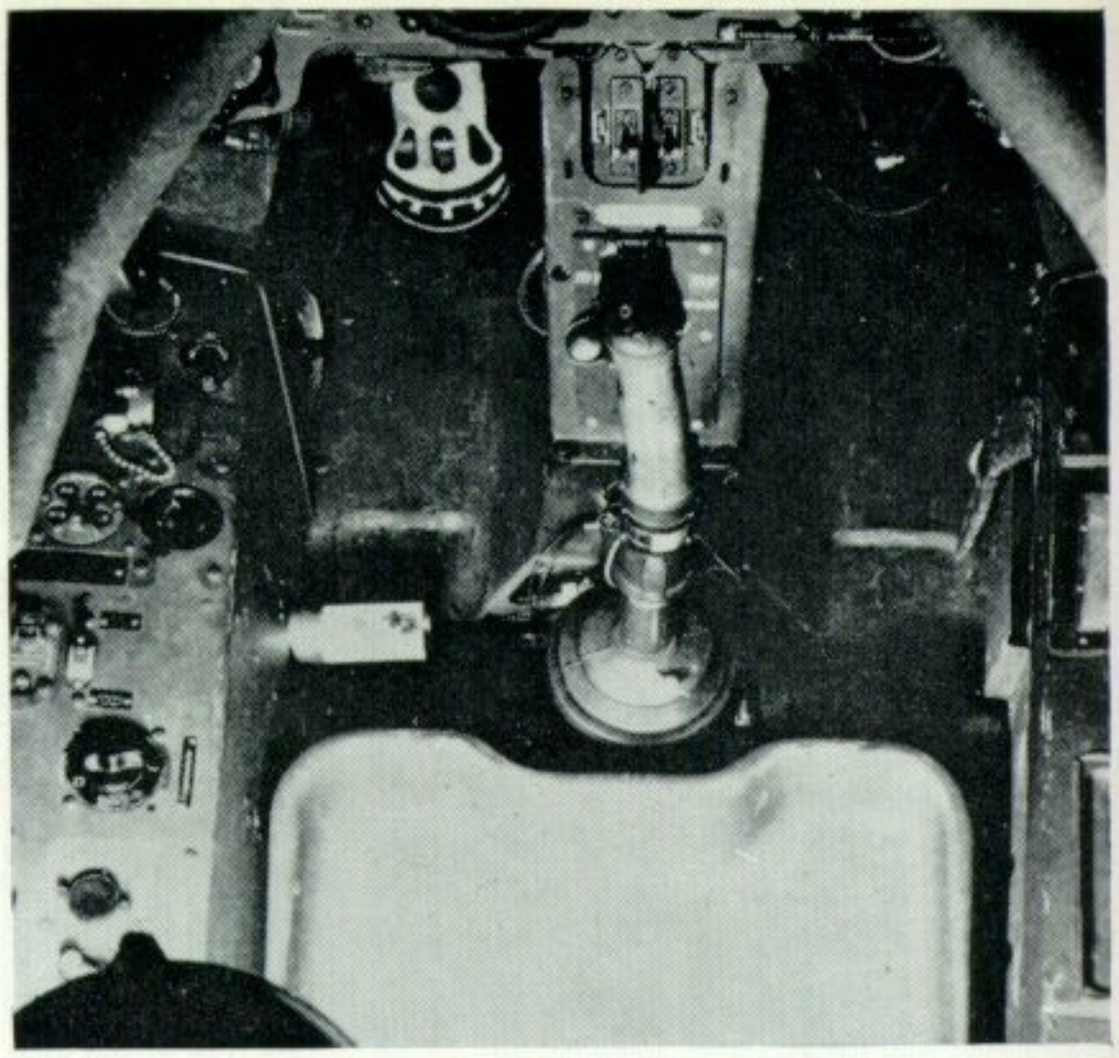
THE "DORA 9" ENTERS SERVICE

The Fw 190 D-9 or "Dora 9" as it was nicknamed, proved an immediate success when it entered service with the Luftwaffe's *Jagdflieger* in the late summer of 1944. One of the first *Gruppen* to equip with the fighter was III./JG 54 "Grünherz" under Hptm. Robert "Bazi" Weiss (*Ritterkreuz*) which received its new machines in September 1944. After re-equipment had been completed, III./JG 54 moved to its operational bases at Hesepe and Achmer near the Dutch border. It was on these airfields that *Kommando Nowotny*, the first unit to be equipped with the revolutionary jet fighter, the Me 262, was based. The Messerschmitt fighter was most vulnerable when taking-off and landing and it was for this reason that III./JG 54 was based in the area, to cover the jets during these manœuvres. On 8th November 1944 *Kommando Nowotny* lost three of its pilots including the *Kommandoführer*, Major Nowotny (holder of the Knight's Cross with Oak Leaves, Swords and Diamonds and credited with 258 air victories), who was shot down by a formation of P-51 Mustangs near Bramsche. The death of its founder resulted in *Kommando Nowotny* being withdrawn from operations to form the nucleus of the first jet fighter wing, *Jagdgeschwader* 7.

The next *Jagdgruppe* to equip with the "Dora 9" was II./JG 26 "Schlageter" under Major Karl Borris which was based at Handrup, north-west of Osnabruck. It may serve to give the reader some insight into *Luftwaffe* fighter operations at this time to quote from I./JG 26's war diary from the time of its re-equipment with the Fw 190 D-9 in October 1944 until the end of the year.

12th October 1944
Take-off between 10.28 and 10.30 hours from Handrup near Furstenau by twenty-two Focke Wulf 190 Ds. At 11.50 hours, the German fighters were intercepted by U.S.A.A.F. P-51 Mustangs and P-47 Thunderbolts while flying near Hannover at 22,000 ft. No bombers were intercepted. The Fw 190s landed at Dortmund, Hildesheim, Hannover/Langenhagen and Oldenburg.

16th to 23rd October 1944
No operations because of impossible ground conditions.



Cockpit interior of the D-9, showing pilot's seat, control column, rudder pedals and port instrument console.
(Photo: H. J. Nowarra)

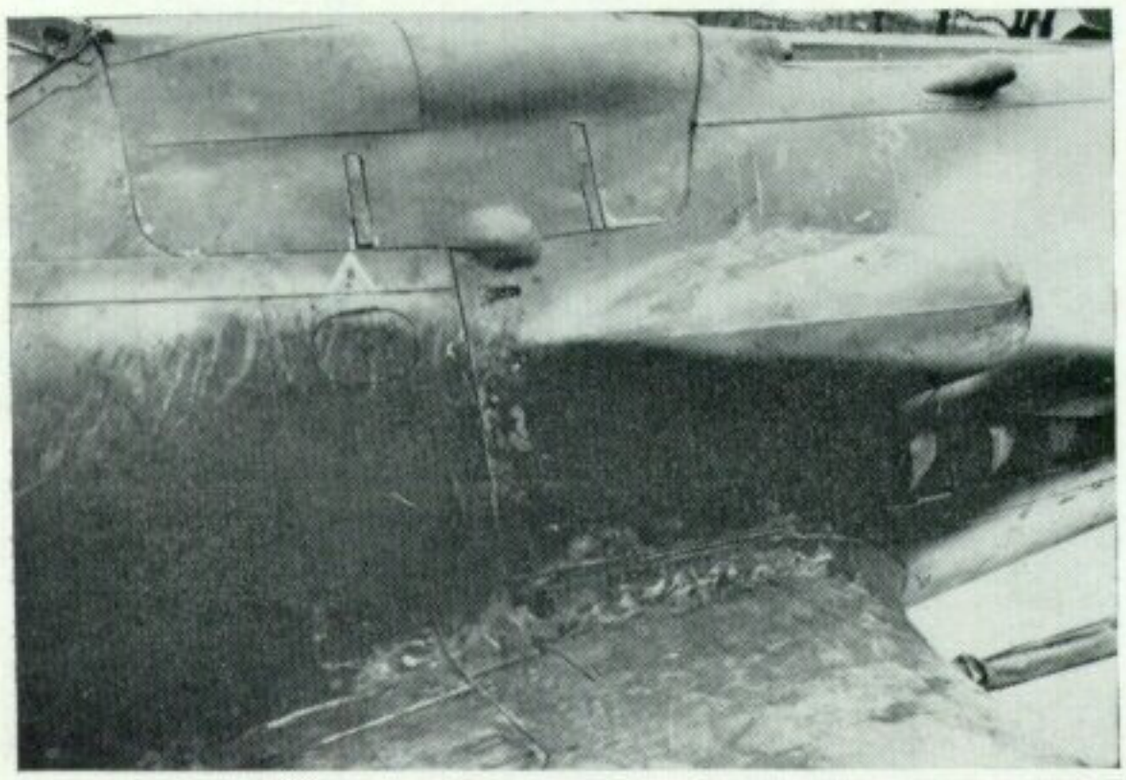
8th November 1944
Generaloberst Stumpf from Luftflotte Reich visited I./JG 26 at their base at Furstenau.

27th November 1944
In the morning, an abortive sortie by four Fw 190s. New aircraft arrive during the morning to increase *Gruppe* strength to sixty-nine Fw 190s.

3rd December 1944
At 11.00 hours, Major Borris, the Kommandeur of I./JG 26 took off with twenty-three Fw 190s. Four aircraft returned with engine failures. Lt. Gunther's *Staffel* intercepted R.A.F. Typhoons and shot down three.

5th December 1944
At 09.25 hours, twenty-nine Fw 190s took-off under Oblt. Heckmann, between 10.05 and 10.15 hours they were attacked by a low flight of P-47 Thunderbolts engaged in strafing attacks in the Luttice area. Oblt. Gunther shot down a P-47. At 13.15 hours, Major Borris led Fw 190s to intercept some straggling U.S.A.A.F. B-17 Fortresses. Borris shot down a B-17 and his machines were down at Handrup by 13.45 hours. A sortie of nine Fw 190s took-off at 14.30

Left: *Cowling detail of the "Dora 9". Note the bulged fairings over the two 13-mm. MG 131 machine guns in the upper cowling, and details of exhaust stack and intake.* Right: *Another view of the D-9's cowling, looking to the rear. Note panel and canopy details.*



This captured D-9 was tested in America with the Foreign Evaluation number FE-121. The camouflage and markings were applied in the U.S.A.; this machine is now in storage for the Smithsonian Institution in Washington. (Photo: Imperial War Museum)

hours, engaged in combat with P-47s with no result, landed at 16.01 hours.

10th December 1944

At 14.50 hours, Oblt. Heckmann led nineteen Fw 190s in a dogfight with U.S.A.A.F. fighters. One P-47 and one P-51 were brought down.

18th December 1944

Total complement of I./JG 26 is fifty-two Fw 190 A-8s and twenty-eight Fw 190 D-9s.

23rd December 1944

At 11.14 hours a sortie by 2 and 3 *Staffeln* of I./JG 26 with twenty-eight Fw 190s led by Ofw. Schwarz took off. Two enemy aircraft shot down.

24th December 1944

Between 11.14 and 11.20 hours, eighteen Fw. 190s took-off to intercept a force of eighty to ninety B-17 Fortresses with fighter escort. One P-38 Lightning and an army Auster were shot down.

25th December 1944

At 10.57 hours seven Fw 190s took-off and engaged in dogfights with P-51 Mustangs. At 14.20 hours there was another alert and combats ensued with P-51s, but there was no result.

26th December 1944

At 10.18, Oblt. Hartigs led a sortie of fifteen Fw 190s from 1 and 4 *Staffeln*. Dogfights with P-51 Mustangs—one shot down by Ofw. Schwarz.

31st December 1944

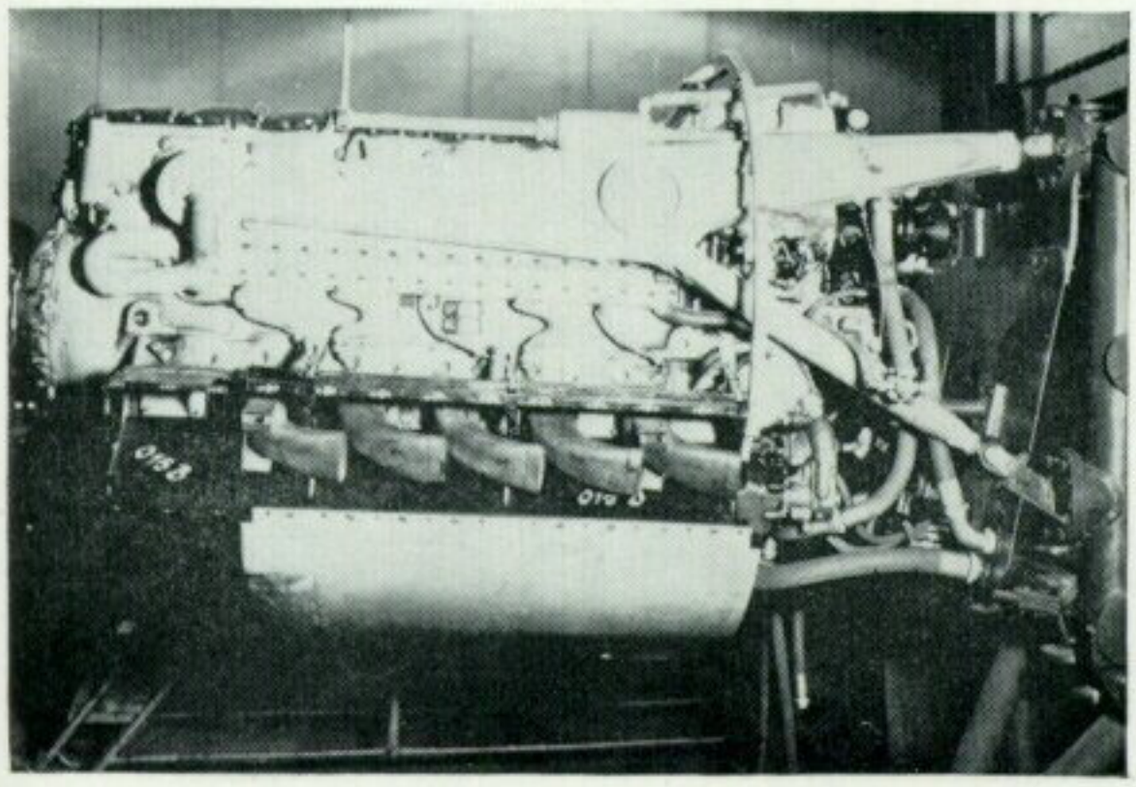
14.35 hours. Precautions are made for the "Operation Herrman", the attack on Allied airfields planned for New Year's Day, 1945.

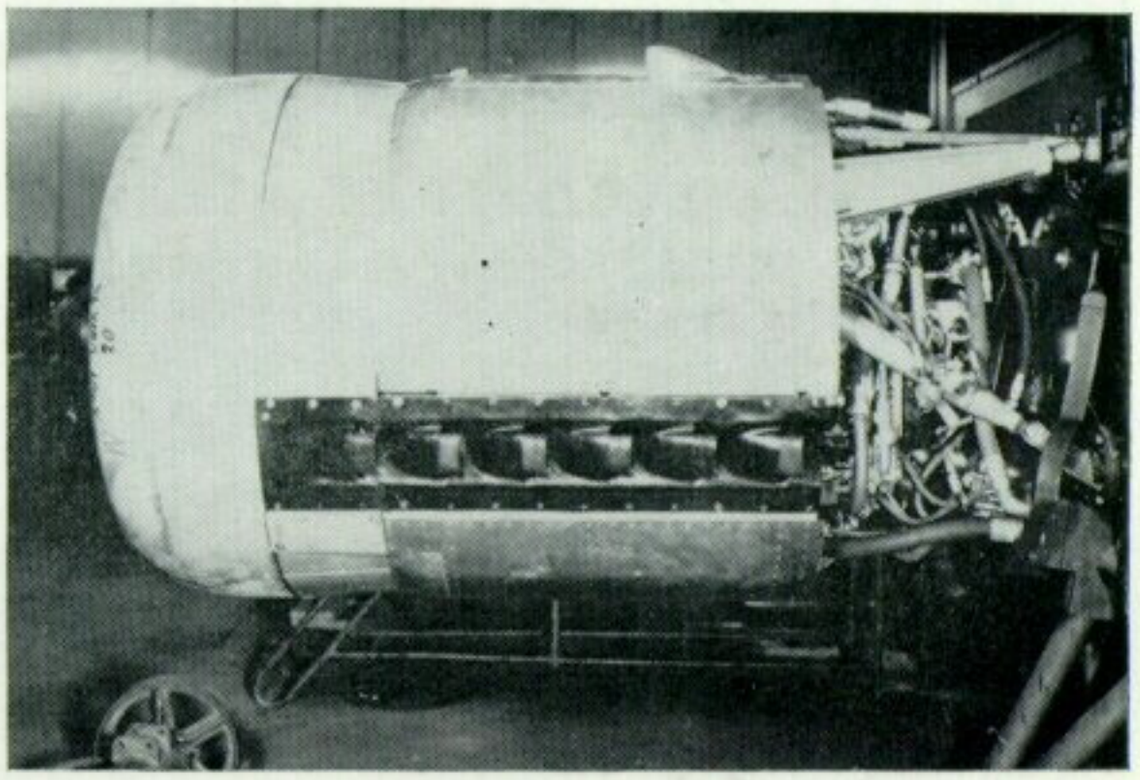
On 10th December 1944, the four *Staffeln* (9, 10, 11 and 12) of III./JG 54 had no less than sixty-nine Fw 190 D-9s on hand but this total fluctuated considerably with the fortunes of the *Gruppe*. On Christmas Day 1944, III./JG 54 transferred from Varrelbusch between Achmer and Oldenburg and was put under the control of Oberst Josef Priller's *Jagdgeschwader* 26. Four days later the *Gruppe* suffered its blackest day when its Kommandeur, Hauptmann "Bazi" Weiss and five other *Jagdflieger* were shot down and killed during a battle with a large R.A.F. Spitfire formation. Here it is interesting to note the losses suffered by other *Jadgruppen* during this period.

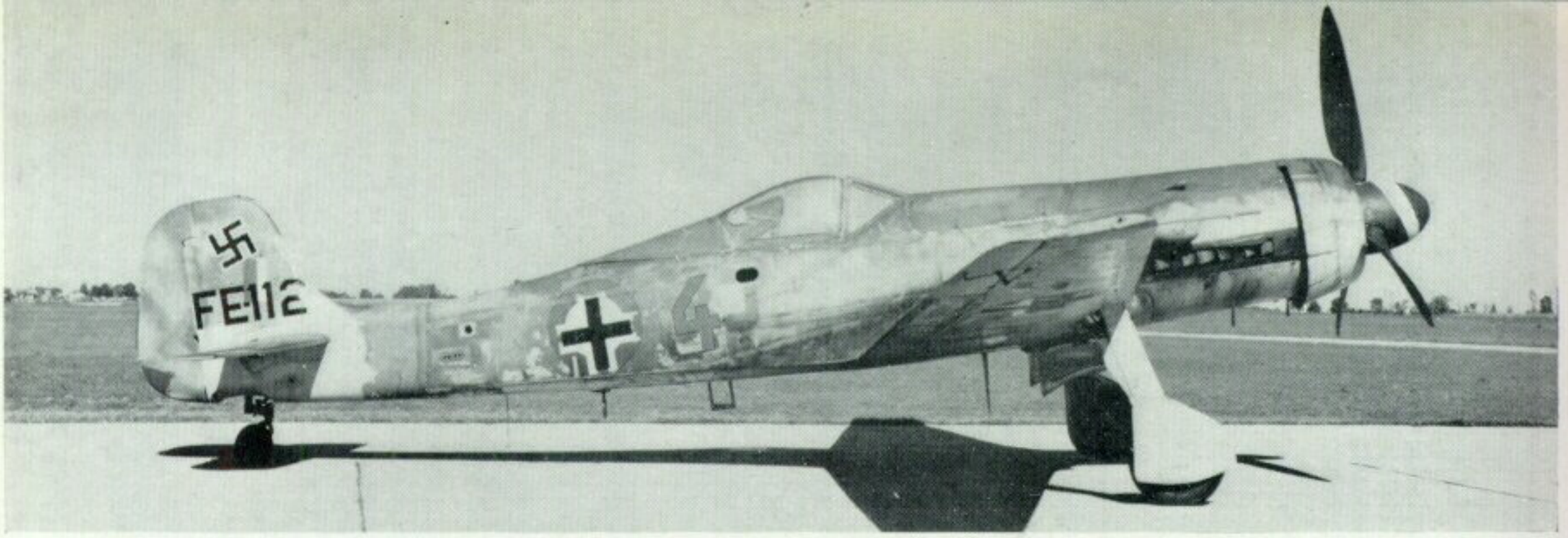
JG 26 with Fw 190 A-8s and D-9s lost eighteen pilots killed during the period 18th—26th December 1944.

JG 27 with Bf 109 G-6s, G-10s and G-14s lost forty-five pilots during 17th and 29th December 1944.

Left: *The 1,770-h.p. Junkers Jumo 213A-1 liquid-cooled engine which powered the Fw 190D-9.* Right: *The Jumo 213A-1, with cowling fitted, on the Focke-Wulf production line.*







Side view of Ta 152H-0 (W.Nr.0003) which was captured and tested first in Britain and later in the U.S.A. Fake Luftwaffe *markings have been added over the R.A.F. roundels and the Foreign Evaluation number FE-112 applied on the tail and under the wings.*
(Photo: John W. Caler Collection)

III./JG 3 with Bf 109 G-14s lost seventeen pilots killed during 17th and 29th December 1944.

IV./JG 54 with Fw 190 A-8s lost twenty-three pilots killed during the same period.

Weiss was temporarily replaced as *Gruppen* Kommandeur of III./JG 54 by Oblt. Hans Dortenmann, but on 25th February 1945 the unit was redesignated IV./JG 26 and put under the command of Major Hans Klemm. The *Gruppe* then comprised three *Staffeln:* 13./JG 26 under Lt. Crump with eight pilots, 14./JG 26 under Oblt. Dortenmann with eleven pilots and 15./JG 26 under Oblt. Heilmann (author of *Alert in the West*) with nine pilots. JG 26 now comprised four *Gruppen*, all, with the exception of III *Gruppe* which had a few Bf 109 G-14s and K-4s equipped with the Fw 190 D-9. *Jagdgeschwader* 2 "Richtofen" were also equipped with the Fw 190 D-9 and the type had begun to enter service with JG 301, one of the special Reich defence units.

These *Gruppen* all took part in "Operation Herrmann" the mass attack by most of the Luftwaffe's remaining fighter aircraft on Allied airfields in Holland, Belgium and northern France. This was virtually the last fling of the Luftwaffe's piston-engined fighter formations as stocks of fuel rapidly declined following systematic Allied bombing of German refineries, and priority was given to the units equipped with jet aircraft. A small amount of fuel was made available to conventionally powered fighter formations, but this was of little use. In April 1945, *Jagdgeschwader* 6 "Horst Wessel" under Major Gerhard Barkhorn based at Sorau/Silesia was re-equipped with no less than 150 brand new Fw 190 D-9s from the nearby Focke Wulf factory. However, through lack of fuel, the *Geschwader* was only able to mount standing patrols of four aircraft!

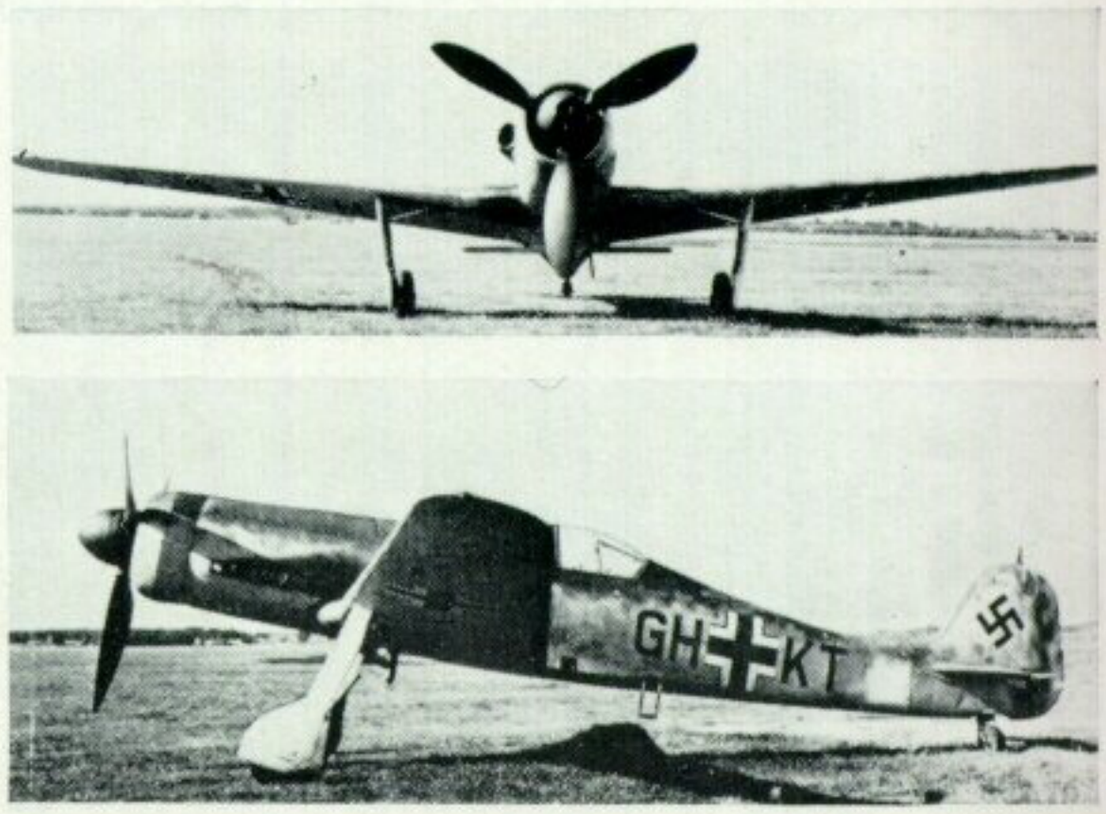
THE Fw 190 BECOMES THE Ta 152

In 1944, the *Reichluftfahrtministerium* decided to institute a policy of naming the designer in all new aircraft designations. In the event only two designers, Dipl. Ing. Kalkert of the Gothaer Waggonfabrik A.G., and Dipl. Ing. Kurt Tank of the Focke Wulf Flugzeugbau G.m.b.H., received this honour. Thus, further variants of the Fw 190 series were to be designated Ta 152 and Ta 153. The latter was a much advanced high altitude project with a high aspect ratio wing, a DB 603 engine and four-bladed airscrew. Several development aircraft were built including the Fw 190 V 32/U1 (W.Nr.0057) and the V 33/U1 (W.Nr.0058) but the design was abandoned as it was felt that by the time the aircraft had been tooled up for production, the advanced jet fighter the Ta 183 would be ready to leave the assembly lines.

The Ta 152 was a much less radical modification of the Fw 190 D series and could be produced with little or no disruption of the production machinery. The Ta 152 A-1 was generally similar to the Fw 190 D-9, but was to have had four 20 mm. MG 151/20 cannon and FuG 24 radio in place of the FuG 16 ZY.

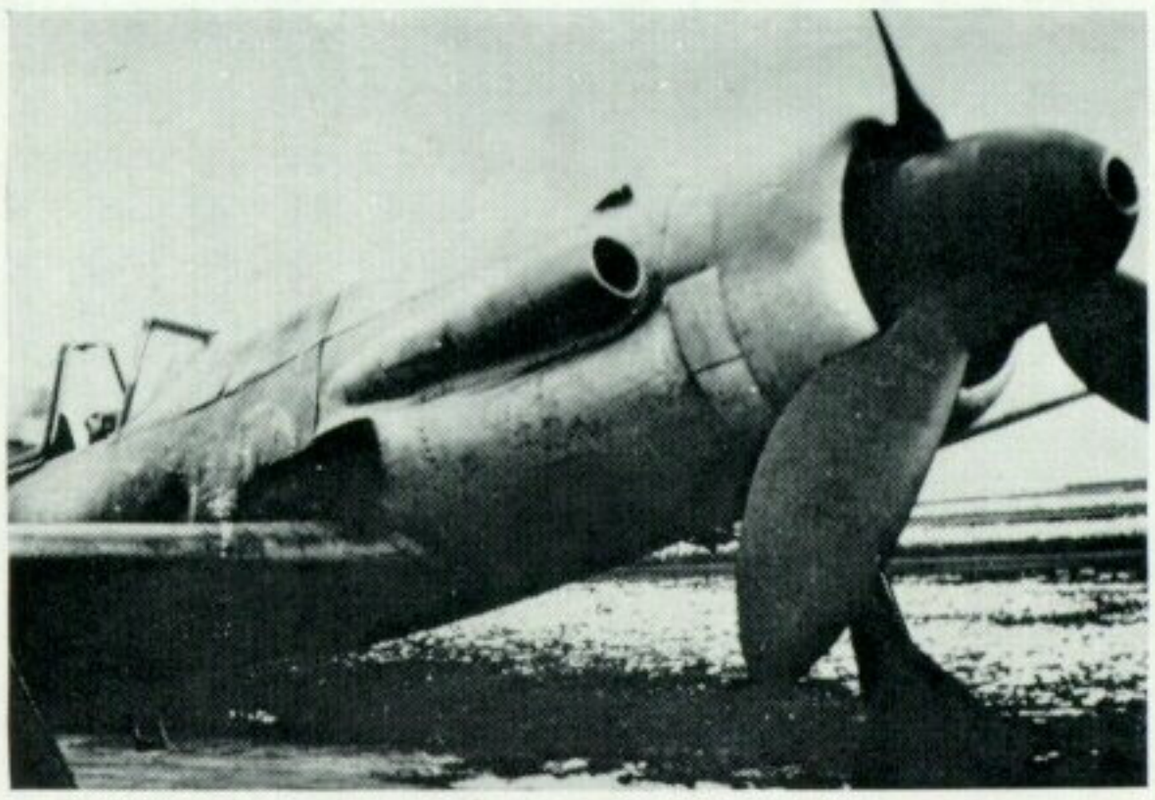
The Ta 152C-0/R/11 pictured on page 3 of this Profile, *an all-weather fighter version of the pre-production C series. This view probably captures the distinctive lines of the later Focke-Wulf fighters better than any other existing photograph.*
(Photo: Imperial War Museum)

Two views of the V-30/U1 (W.Nr.0055) coded G H + K T, which served as prototype for the Ta 152H-0. This machine crashed at Langenhagen on 13th August 1944.
(Photos: Imperial War Museum)



This view of a pre-production Ta 152H-0 shows to advantage the high aspect ratio wings of this high-altitude interceptor.
(Photo: H. J. Nowarra)

Ta 152H-0 (W.Nr.0003) at Langenhagen airfield in 1945, in its original German markings. (Photo: H. J. Nowarra)



Nose of the Ta 152V-20 (W.Nr.110020) one of the three prototypes of the Ta 152B-5/R11 all-weather fighter.
(Photo: H. J. Nowarra)

The Ta 152 A-2 was similar and like its predecessor, remained in the project stage. The Ta 152 B series was similar to the A but was equipped with an engine-mounted 30 mm. MK 108 cannon and GM-1 power boosting. Five sub-series were proposed of which the Ta 152 B-1 and B-2 remained projects only, the B-3 was a ground support aircraft, the B-4 was a heavy fighter of which two versions, the B-4/R1 and B-4/R2 were built. The Ta 152 B-5, for which the modified Fw 190 V 53 and V 68 (W.Nr.170003) were prototypes, had a Jumo 213 E engine and an armament of three 30 mm. MK 103 cannon. An all-weather version of this last model was also projected, designated Ta 152 B-5/R11, for which the Ta 152 V 19 (W.Nr.110019), V 20 (W.Nr.110020) and V 21 (W.Nr.110021) were forerunners.

The second major production version (the Ta 152 H being the first as will be explained later) was the Ta 152 C. The twenty-first prototype of the Fw 190 was modified under the designation Fw 190 V 21/U1 as the forerunner of the Ta 152 C-0. This aircraft differed mainly from the earlier models in having a 1,800-h.p. Daimler Benz DB 603 E engine mounted in a longer fuselage giving the aircraft a maximum speed of 448 m.p.h. with the aid of GM-1. Other prototypes for the C series were the Ta 152 V 6 (W.Nr.110006), the Ta 152 V 7 (W.Nr.110007) with all weather equipment, the Ta 152 V 8 (W.Nr.110008) with EZ 42 gunsight and the Ta 152 V 15 which was never completed. Conversion packs for the Ta 152 C-1 included the /R11 for a bad weather fighter, the /R14 with ETC 504 bomb-racks and the /R31 with increased GM-1 capacity. The Ta 152 C-2 had different radio equipment and the Ta 152 C-3 featured a MK 103 cannon in place of the engine-mounted MK 108. Prototypes included the Ta 152 V 16 (W.Nr.110016), the V 17 (W.Nr.110017), the V 27 (W.Nr.150030) and the V 28 (W.Nr.150031). The projected Ta 152 C-4 was to have carried 210-mm. WGr 21 rocket tubes, the Ta 152 V 22, V 23 and V 24 being ordered as prototypes, but never completed.

The Ta 152 E was a special photo-reconnaissance version of the Ta 152 C, powered by a Jumo 213 E engine. The Ta 152 E-1 carried a vertically-mounted Rb 20/30, 50/30 or 75/30 camera, the Ta 152 V 9 (W.Nr.110009) and V 14 (W.Nr.110014) acting as prototypes. The Ta 152 E-1/R1 had an obliquely mounted camera and the Ta 152 E-2 was a specialised high altitude version of the E-1 with the wing of the H series. One prototype only, the Ta 152 V 26 W.Nr. 110021) was completed.

Although the previously described variants were given earlier designations, the first aircraft to enter service was the Ta 152 H high-altitude machine. This actually followed the Fw 190 G rather than the Ta 152 E and was provided with the Jumo 213 engine of the Fw 190 D series. The first prototype for the Ta 152 H-0 was the Fw 190 V18/U2 (W.Nr.0040) which was

Another view of 0003 in the United States. The machine is still intact. (Photo: H. J. Nowarra)

Captured Ta 152H-1 photographed at the Farnborough display of enemy aircraft held in October/November 1945.
(Photo: Imperial War Museum)

Captured Fw 190As, Ds, Fs and Gs on a German airfield at the end of the European war. Note the varying styles of marking.
(Photo: Gruppe 66 Archiv)

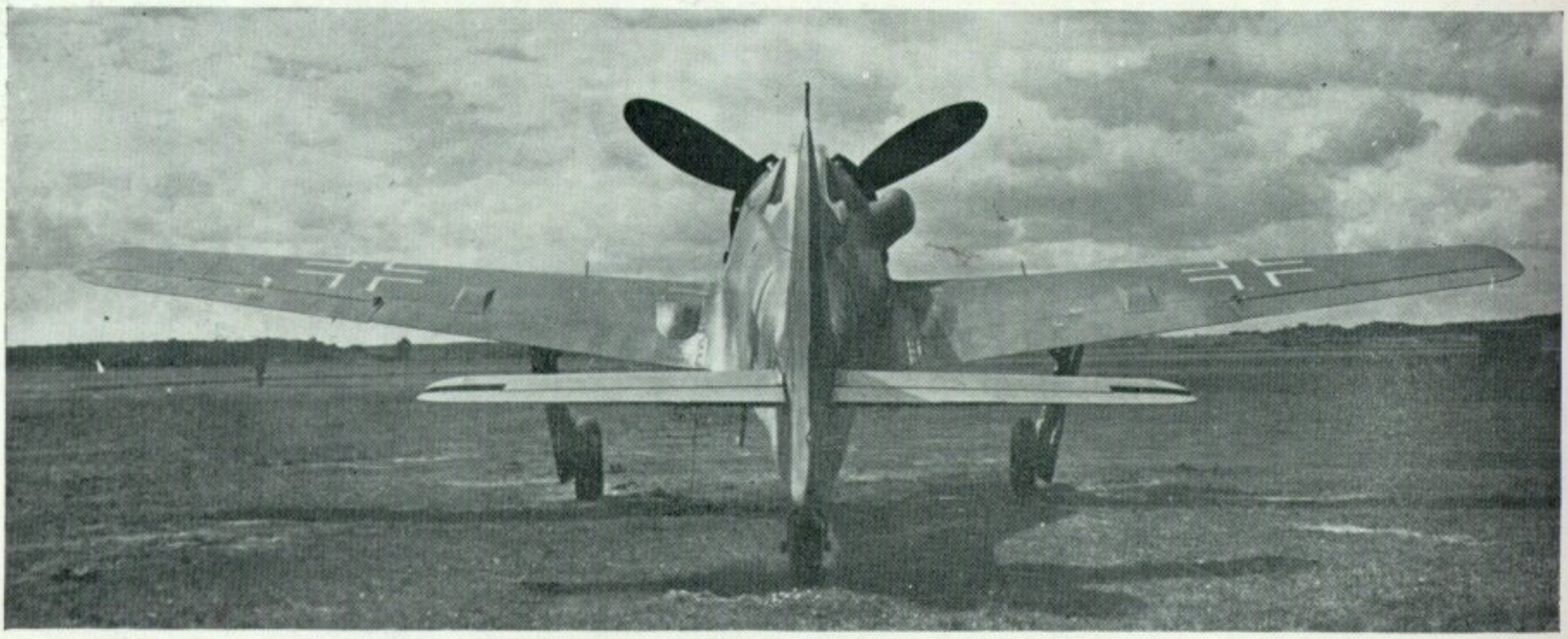
re-built from the V 18/U2. The wing of the Ta 152 H spanned 47 ft. 6¾ ins. and was of high-aspect ratio, numerous lateral stringers reinforcing the wing structure. The Fw 190 V 18/U2 crashed on 8th October 1944 on one of its early test flights, but was followed shortly afterwards by the Fw 190 V 20 (W.Nr.0042) which although having the Jumo 213 A engine and standard armament, retained the standard wing of the Fw 190 D.

The first Ta 152 H prototype with full equipment was the V 29/U1 (W.Nr.0054) "GH+KS" which had long span wings and a pressurised cabin. Armament comprised an engine-mounted 30 mm. MK 108 and two wing-mounted 20 mm. MG 151/20 cannons. The Fw 190 V 30/U1 (W.Nr.0055) "GH+KT" was similar but all armament was removed. The last Ta 152 H-0 prototype was the Fw 190 V 32 /U1 (W.Nr.0057) which was powered by a Jumo 213 F engine. This was later re-built as the Fw 190 V 32/U2 with Jumo 213 E engine and the MK 213 cannon (a special rapid-firing 20 mm. weapon).

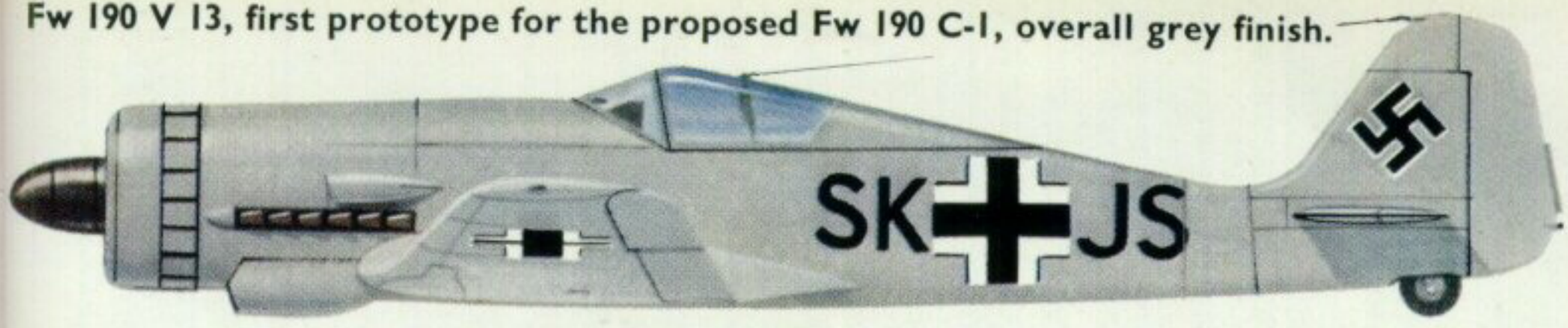
The Ta 152 H-0, although given a pre-production designation, was virtually a production machine. A small number of Ta 152 H-0s were delivered in the spring of 1945 to the *Geschwader Stab* of JG 301, which as already mentioned, was equipped with the Fw 190 D-9. JG 301, like III./JG 54 previously, were engaged in the protection of the Me 262 fighter bases. Some idea of the startling increase in performance of the Ta 152 over previous Luftwaffe fighters can be gained by the following incident. Late in 1944, Kurt Tank, himself no mean pilot, was flying a Ta 152 H between Langenhagen and Cottbus when he was "bounced" by a section of P-51 D Mustangs. Tank operated the control for the MW-50 water-methanol injection and the machine leapt forward leaving the startled Americans far behind.

Several Rusatz conversion packs were designed for the Ta 152 H series including the /R11 all-weather fighter, the /R21, similar but with no GM-1 power boosting and the /R31 with GM-1 but no MW-50. The first production model proper was the Ta 152 H-1, which differed from the H-0 solely in having increased fuel capacity. The only prototype was the Ta 152 V 26 (W.Nr.110026) although another prototype, designated V 25 had been built only to be dismantled. The projected Ta 152 H-2 was similar but had FuG 15 radio equipment in place of FuG 16 ZY. The Ta 152 H-10 was a reconnaissance variant with an Rb 20/30, Rb 50/30 or Rb 75/30 camera to replace the Ta 152 E-1.

The prototype for the Fw 190D-11 was the V-56 (W.Nr.170924). Visible in this rear view are the small horns protruding above the inner wings, indicating undercarriage position.
(Photo: H. J. Nowarra)

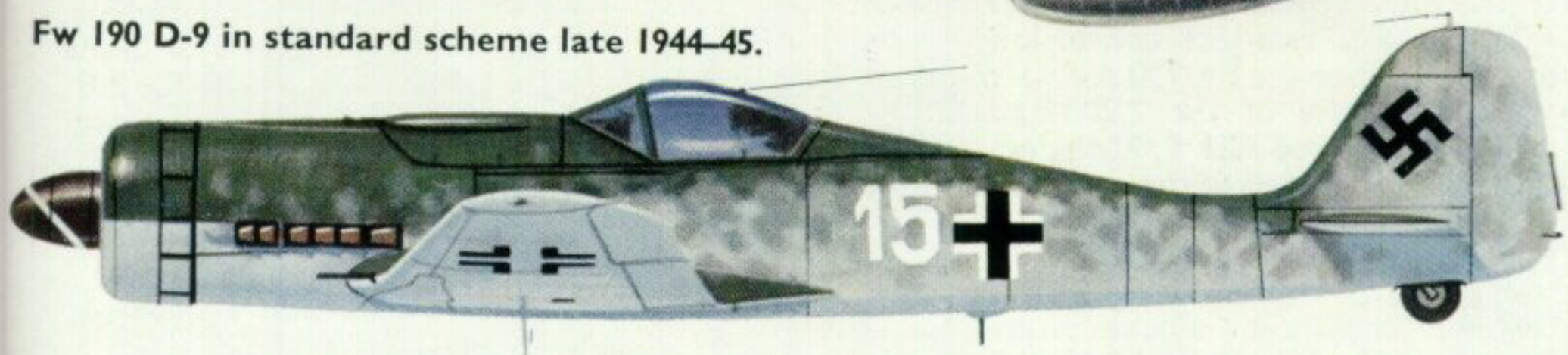


Fw 190 V 13, first prototype for the proposed Fw 190 C-1, overall grey finish.



Fw 190 V 18 (W.Nr.0040) prototype, fitted with a Hirth turbo-supercharger and was nicknamed "Kangaroo". Bare metal finish.

Fw 190 D-9 in standard scheme late 1944–45.

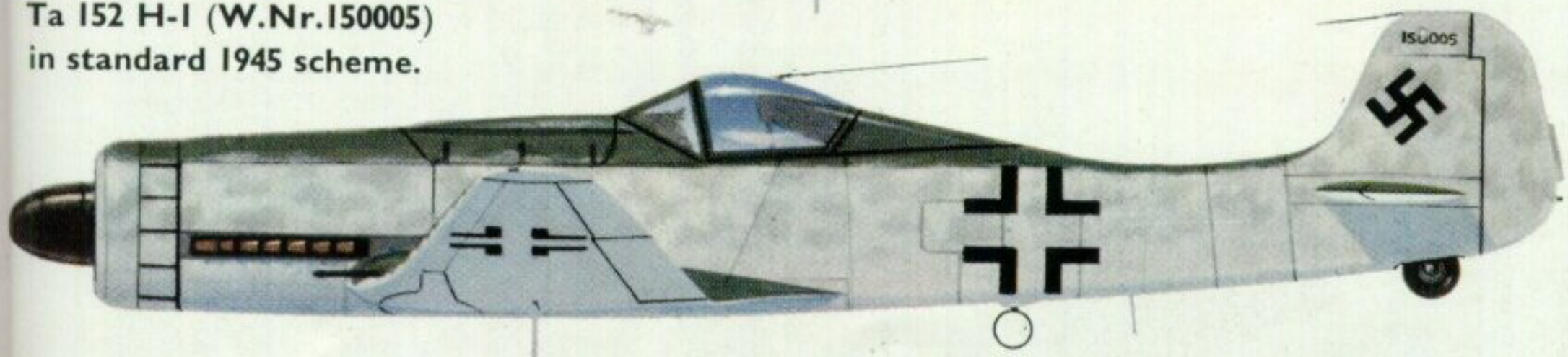


Fw 190 D-9 crashed at Wemmel, near Brussels on 1st January 1945.

Fw 190 D-9 in standard 1945 scheme with Home Defence identification bands.

Ta 152 C-0/R11 (W.Nr.0607), note fuselage cross on green ground.

Ta 152 H-1 (W.Nr.150005) in standard 1945 scheme.



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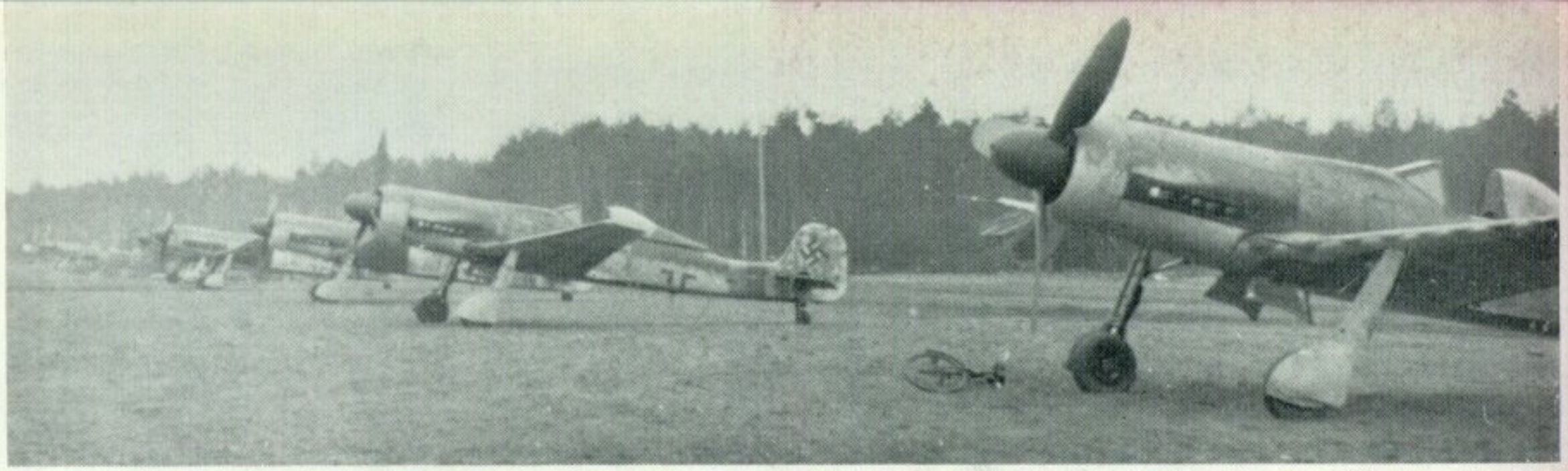

Photographic proof that the Ta 152H was issued to front-line units. This line-up of aircraft shows application of fuselage bands in red and yellow (second aircraft from right) and code numbers (fourth aircraft, red "2"). The machines almost certainly operated with the Staff Flight of JG 301.
(Photo: Dolling via Seeley)

Final projected variants of the Ta 152 included the long-range R series with provision for extra fuel and the Ta 152 S-1 tandem two-seat conversion trainer similar in many respects to the Fw 190 A-8/U1. Other projects included the use of the 2,200-h.p. Jumo 222 A/B or 3,000-h.p. Jumo 222 E/F engine. The Ta 152 C was also to be modified to tow a Gotha P.57 glider bomb. This was a simple glider type vehicle spanning 15 ft. 6 in. which was to be towed above and behind this aircraft.

After the war, several "long-nose" Focke Wulfs were captured and tested in the United States by the Foreign Evaluation unit at Freeman Field. These included a Ta 152 H-0 (FE-112) and two Fw 190 D-9s (FE-118 and FE 121). The former was originally test flown in the British Isles together with a Ta 152 H-1 (W.Nr.150168) which was given the Air Ministry number 11.

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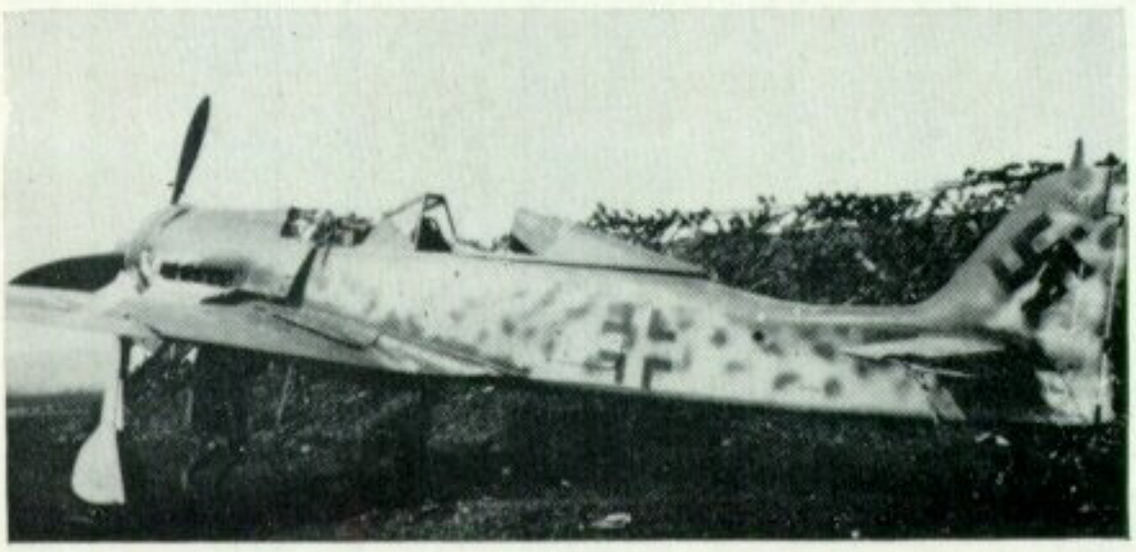
Acknowledgement is made of the invaluable collaboration of Ian Primmer, Esq., without whose aid the article could not have been written.

Two views of the best-known operational Fw 190D; variously identified in the past, this machine is almost certainly the D-9 of a Staff Major flying with JG 26, photographed at Rhein-Main in 1945. Note Reichsverteidigung *fuselage bands.*
(Photos: Swisher via Seeley)

A camouflaged "longnose" photographed in 1945.
(Photo: Olmsted via Seeley)



SPECIFICATIONS

FOCKE WULF Fw 190 D-9

Dimensions: Span 34 ft. 5⅜ in. Length 33 ft. 5¼ in. Height 11 ft. 0¼ in. Wing Area 196·979 sq. ft.
Powerplant: One Junkers Jumo 213 A-1 twelve-cylinder, inverted Vee, liquid-cooled in-line engine rated at 1,776 h.p. for take-off and 1,200 h.p. for continuous running. This could be increased to 2,240 h.p. with the addition of MW-50 water-methanol injection.
Armament: Two 20 mm. MG 151/20 cannon with 250 r.p.g. mounted in the wing roots and two 13 mm. MG 131 machine guns mounted above the engine cowling with 475 r.p.g.
Weights: Empty 7,694 lb. Loaded 9,480 lb.
Performance: Maximum speed (with MW-50) 357 m.p.h. at sea level, 397 m.p.h. at 10,820 ft., 426 m.p.h. at 21,653 ft. and 397 m.p.h. at 32,810 ft. Climb to 6,560 ft. was 2·1 min.; to 13,120 ft. was 4·5 min.; to 19,685 ft. was 7·1 min.; and to 32,810 ft. was 16·8 min. Normal range was 520 miles at 18,500 ft.

FOCKE WULF Ta 152 C-3

Dimensions: Span 36 ft. 1 in. Length 35 ft. 5½ in. Height 13 ft. 0 in. Wing area 216 sq. ft.
Powerplant: One Daimler Benz DB 603 L twelve-cylinder, inverted Vee, liquid-cooled in-line engine rated at 2,100 h.p. for take-off.
Armament: One 30 mm. MK 103 cannon firing through the spinner and four 20 mm. MG 151/20 cannon in the wings.
Weights: Empty 9,058 lb. Loaded 11,025 lb. Maximum loaded 12,125 lb.
Performance: Maximum speed 339 m.p.h. at sea level, 350 m.p.h. with MW-50, 439 m.p.h. at 37,000 ft., 463 m.p.h. with MW-50. Service ceiling 40,350 ft.

FOCKE WULF Ta 152 H-1

Dimensions: Span 47 ft. 6¾ in. Length 35 ft. 5½ in. Height 13 ft. 0 in. Wing area 252·95 sq. ft.
Powerplant: One Junkers Jumo 213 E/B twelve-cylinder, inverted Vee, liquid-cooled in-line engine rated at 1,880 h.p. at sea level and 2,250 h.p. with MW-50 water-methanol injection.
Armament: One 30 mm. MK 108 cannon firing through the spinner and two 20 mm. MG 151/20 cannon in the wing roots.
Weights: Loaded 10,472 lb. Maximum loaded 11,508 lb.
Performance: Maximum speed 431 m.p.h. at 35,000 ft; 465 m.p.h. at 30,000 ft. with MW-50 and 472 m.p.h. at 41,000 ft. with GM-1 and MW-50. Normal range 745 miles at 372 m.p.h. at 32,800 ft. Service ceiling 48,560 ft.

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